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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,758	01/26/2004	Makoto Yoshino	4041K-000169	1893
27572	7590	10/24/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			KEE, FANNIE C	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/765,758	YOSHINO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Fannie C. Kee	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07 September 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 1-6, 9 and 12-42 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 7, 8, 10, and 11 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 26 January 2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____.                                     |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20040126</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|   | 6) <input type="checkbox"/> Other: _____.                         |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Species I drawn to Figures 9-12 and claims 7-8 and 10-11 in the reply filed on 9/7/2006 is acknowledged.
2. Claims 1-6, 9, and 12-42 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/7/2006.

### ***Drawings***

3. The drawings are objected to because different embodiments should use different reference element numbers. The same reference element number should not be used to identify a feature in one drawing and then re-used to identify a modification of said feature in another drawing figure. Such usage is proscribed. See MPEP 608.02(e).

In Figure 9, it is unclear what reference element "13a" is designating. It is referenced within the specification as the "large diameter joining portion" but appears to be pointing at a seal in Figure 9.

Figure 10 is missing the corresponding section lines from Figure 9.

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

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be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Specification*

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The abstract of the disclosure is objected to because of its length which does not meet the requirements as stated above.

Correction is required. See MPEP § 608.01(b).

7. The disclosure is objected to because it is replete with minor grammatical errors too numerous to mention. The specification should be revised carefully. Examples of such errors are: “[w]hen length of the piping members is increased” (page 2, line 15); “the mounting property the vapour-compression” (page 6, lines 28-29); “can be differently joined” (page 33, line 28); “composed of two divided part jointed by a hinge means” (page 61, lines 26-27).

Correction is required.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 7, 8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Cowan U.S. Patent No. 2,143,843.

With regard to claim 7, Cowan discloses a double pipe structure as follows: an inner pipe 10 for circulating fluid of high pressure is laid in an outer pipe 11 for circulating fluid of low pressure and the inner and the outer pipe are formed differently from each other and joined to a joint member 20 at the respective end portions, wherein the inner and the outer pipe are joined to the joint member by a plastically deforming means 27, 25.

With regard to claim 8, Cowan discloses a double pipe structure as follows: where the joint member 20 includes a port 22 connected to another pipe 34, the plastically deforming means joins the inner pipe to the joint member by means of drawing for expanding an end portion or by means of bead pressure-contact machining, and the outer pipe is joined to the joint

member when the outer pipe is pressure-connected to the joint member by means of drawing for contracting an end portion of the pipe (Figure 1).

With regard to claim 10, Cowan discloses a double pipe structure as follows: where a seal member 27 is interposed in the joint portion of the joint member and the inner pipe or in the joint portion of the joint member and the outer pipe.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cowan as applied to claims 7, 8, and 10 above, and further in view of Inaba U.S. Patent No. 4,732,414.

Cowan discloses a double pipe structure with an inner pipe, an outer pipe and a joint member but does not disclose that the rigidity of the inner pipe is lower than the rigidity of the outer pipe. Inaba teaches that it would be obvious to have a double pipe structure where the inner and outer pipes would have different rigidities especially in the case where a combustible or poisonous gas was being carried.

Therefore, it would have been obvious to one of ordinary skill in the art to have modified the double pipe structure of Cowan with the teaching of Inaba to create a double pipe structure that would be capable of carrying dangerous fluids and preventing any leaks to the outside atmosphere as suggested by Inaba (column 1, lines 24-31).

***Conclusion***

12. Inaba is cited to show an example of another double pipe structure.
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fannie C. Kee whose telephone number is (571) 272-1820. The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Fannie C. Kee  
October 16, 2006

  
Daniel P. Stodola

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